

CLAIMS

5 Sub B1 1. A laminate comprising: (A): a substrate, (B): an adhesive that becomes (capable of) release when receiving energy, and (C): an adhesive that does not become (capable of) release even when receiving energy, which are laminated sequentially.

2. The laminate according to claim 1, wherein the substrate (A) is at least one selected from a metal, an inorganic substance, plastic, synthetic fiber, natural fiber, chemical fiber, wood, paper, and hide.

10 3. The laminate according to claim 1 or 2, wherein the adhesive (B) is an adhesive of which adhesive power lowers when receiving energy.

15 4. The laminate according to claim 1 or 2, wherein the adhesive (B) is an adhesive containing a foaming agent that foams when receiving energy.

5. The laminate according to claim 4, wherein the adhesive (B) comprises the foaming agent and at least one selected from a room temperature curing resin, a hot-melt resin, a thermosetting resin and a photosetting resin.

20 6. The laminate according to claim 1 or 4, wherein the adhesive (B) that becomes capable of release when receiving energy and the adhesive (C) that does not become capable of release even when receiving energy are (B-1): a crosslinkable polymer containing a foaming agent, and (C-1): a crosslinkable polymer, respectively.

25 Sub B2 7. The laminate according to claim 6, wherein the crosslinkable polymer is a thermosetting resin and/or a photosetting resin.

8. The laminate according to any one of claims 4 to 7, wherein the foaming agent is at least one selected from a thermal expansible hollow body, an inorganic foaming agent, and an organic foaming agent.

5 9. The laminate according to any one of claims 1 to 8, further comprising (B'): an adhesive that becomes capable of release when receiving energy, (B') being same as or different from the adhesive (B), and (A'): a substrate same as or different from the substrate (A), which are sequentially laminated on an adhesive layer surface of the adhesive (C).

10 10. The laminate according to claim 9, wherein: (B) and/or (B') are photosetting resins of a crosslinkable polymer; and (C) and/or (C') are thermosetting resins of a crosslinkable polymer.

15 11. The laminate according to claim 9 or 10, wherein the adhesive (C) is an adhesive that is permeable to energy to such a degree as to allow release of the adhesives (B) and (B').

20 12. A resin composition comprising an epoxy resin and/or a modified silicone resin, and a foaming agent.

13. The resin composition according to claim 12, wherein the foaming agent is at least one selected from a thermal expansible hollow body, an inorganic foaming agent, and an organic foaming agent.

25 14. An adhesive comprising a resin composition according to claim 12 or 13 as an active ingredient.

15. A laminate comprising an adhesive according to claim 14, and an adherend.

16. An article comprising a laminate according to any one of claims 1 to 11 and 15.

17. A substrate recycling method comprising allowing a laminate according to any one of claims 1 to 11 and 15 to receive energy, releasing a substrate, and then recycling the same.